

WHAT IS CLAIMED IS:

- 1           1.     A system for injecting a sponge into tissue, the system comprising:  
2                 a catheter having a closed distal end and a side port adjacent the  
3     distal end for delivering a pledget of sponge material in a hydrated state to the  
4     tissue; and  
5                 an adaptor connected to the catheter for hydrating and delivering  
6     the pledget to the catheter, the adaptor having a tapered lumen with a large  
7     diameter proximal end and a small diameter distal end, wherein the small diameter  
8     distal end is connected to the catheter, and wherein the adaptor is removable from  
9     the catheter.
- 1           2.     The system of Claim 1, wherein the adaptor is fixed to the catheter.
- 1           3.     The system of Claim 1, further comprising a biopsy cannula having  
2     a tissue puncturing distal end and a side port positioned adjacent the distal end,  
3     wherein the catheter is configured to fit within the biopsy cannula to deliver the  
4     pledget to the tissue.
- 1           4.     The system of Claim 3, wherein the biopsy cannula includes a first  
2     indexing member and the catheter includes a second indexing member for radially  
3     aligning the catheter with the cannula.
- 1           5.     The system of Claim 4, wherein the first and second indexing  
2     members include at least one projection and at least one corresponding recess.

1           6.     The system of Claim 3, wherein the biopsy cannula is a breast  
2     biopsy cannula.

1           7.     A system for injecting a sponge into tissue, the system comprising:  
2                 a catheter having a closed distal end and a side port adjacent the  
3     distal end for delivering a pledget of sponge material in a hydrated state to the  
4     tissue;  
5                 an adaptor connected to the catheter for hydrating and delivering  
6     the pledget to the catheter, the adaptor having a tapered lumen with a large  
7     diameter proximal end and a small diameter distal end, wherein the small diameter  
8     distal end is connected to the catheter; and  
9                 a pledget of sponge material preloaded in the adaptor.

1           8.     The system of Claim 7, wherein the sponge is an absorbable sponge  
2     material.

1           9.     The system of Claim 7, wherein the sponge contains a radiopaque  
2     marker.

1           10.    The system of Claim 7, wherein the adaptor and pledget of sponge  
2     material are arranged to deliver the pledget to the catheter.

1           11.    A method of delivering an absorbable radiopaque marker to a  
2     biopsy site comprising:  
3                 capturing tissue from a biopsy site using a cannula inserted to the biopsy  
4     site; and

5 delivering an absorbable radiopaque marker through the cannula to the  
6 biopsy site.

1 12. The method of Claim 11, wherein the absorbable radiopaque  
2 marker is formed of an absorbable sponge material.

1 13. The method of Claim 11, wherein the tissue is removed from the  
2 biopsy site through a side port of the cannula and the absorbable radiopaque  
3 marker is delivered through the side port of the biopsy cannula.

1 14. The method of Claim 11, wherein the cannula remains in place at  
2 the biopsy site after removal of the tissue for delivery of the absorbable  
3 radiopaque marker.

1 15. The method of Claim 11, wherein the absorbable radiopaque  
2 marker is formed of a hemostatic sponge material.

1 16. The method of Claim 11, wherein the tissue is removed from a  
2 breast biopsy site.

1 17. A method of facilitating hemostasis of a biopsy site comprising:  
2 removing tissue from a biopsy site through a side port of a cannula  
3 inserted to the biopsy site; and  
4 delivering a hemostasis promoting material through the side port of  
5 the cannula to the biopsy site, wherein the hemostasis promoting material is  
6 delivered by hydrating and compressing the hemostasis promoting material and  
7 injecting the material by fluid pressure to the biopsy site.

1           18.    The method of Claim 17, wherein multiple tissue samples are  
2    removed at different radial locations around the cannula and delivery of the  
3    hemostasis promoting material is repeated at different radial locations around the  
4    cannula.

1           19.    The method of Claims 17, wherein the hemostasis promoting  
2    material is a sponge pledget.

1           20.    The method of Claim 19, wherein the sponge pledget is absorbable.

1           21.    The method of Claim 19, wherein the sponge pledget includes a  
2    radiopaque marker.

1           22.    The method of claim 17, wherein the tissue is removed from a  
2    breast biopsy site.

1           23.    The method of Claim 17, wherein the cannula remains in place at  
2    the biopsy site after removal of the tissue for delivery of the hemostasis promoting  
3    material.

1           24.    A system for injecting a sponge into tissue, the system comprising:  
2                a catheter having a side port adjacent the distal end for delivering a  
3    pledget of sponge material in a hydrated state to the tissue;  
4                an adaptor connected to the catheter for hydrating and delivering  
5    the pledget to the catheter, the adaptor having a tapered lumen with a large

6 diameter proximal end and a small diameter distal end, wherein the small diameter  
7 distal end is connected to the catheter; and  
8 a pledget of radiopaque sponge material loaded in the adapter.

1 25. A method of delivering an absorbable radiopaque marker to a  
2 biopsy site comprising:  
3 removing tissue from a biopsy site through a cannula inserted to the  
4 biopsy site; and  
5 delivering an absorbable radiopaque marker through the cannula to  
6 the biopsy site by hydrating and compressing the absorbable radiopaque marker  
7 and injecting the marker by fluid pressure to the biopsy site.

1 26. A method of delivering a hemostatic material to a tissue site, the  
2 method comprising:  
3 placing a hemostatic material in a delivery catheter;  
4 inserting a needle into tissue with a distal end of the needle at a tissue site;  
5 inserting the delivery catheter containing the hemostatic material into the  
6 needle; and  
7 delivering the hemostatic material to the tissue site.

1 27. The method of Claim 26, wherein the needle is a biopsy needle and  
2 the hemostatic material is delivered to a biopsy site after a biopsy procedure has  
3 been performed.

1 28. The method of Claim 26, wherein the hemostatic material is an  
2 absorbable sponge.